

## REMARKS/ARGUMENTS

### *Status of the Application*

In the October 16, 2006, Final Office Action, claims 1-5 and 9-15 were rejected. Claim 16 was allowed. In the present response, claims 3, 9, and 15 were amended to correct grammatical errors and for clarity. Claims 1-2 were amended to clarify that the genes encompassed by the claims are either derived from *E. coli* or are as set forth in nucleotide sequences found in the Sequence Listing (support can be found throughout the specification; particularly in the sequence listing; in originally filed claims 4 and 13-14; at page 17, line 29 – page 29, line 13; at page 39, line 28 – page 43, line 28; and in the working examples). Claims 4-5 and 13-14 were canceled without prejudice.

New claims 28 and 29 correspond to canceled claim 5 made independent and directed to the combination of canceled claim 5 with claim 1 (claim 28) and the combination of canceled claim 5 with claim 2 (claim 29). Claim 5 was made independent because the term “consisting of” in the limitation of “consisting of the genes *dxs*, *dxr*, *ygbP*, *ychB*, *ygbB*, *lytB*, *idi*, *ispA*, *ispB*, *crtE*, *crtB*, *crtI*, and *crtY*” would not have allowed the addition of the optional *crtZ* gene to the carotenoid pathway as part of a dependent claim.

Thus, claims 1-3, 9-12, 15-16, and 28-29 are pending. No new matter was added.

### *Rejections Under 35 U.S.C. § 112, 1<sup>st</sup> Paragraph*

Claims 1-5 and 9-15 were rejected under 35 U.S.C. § 112, 1<sup>st</sup> Paragraph, as failing to comply with the written description requirement. Applicants respectfully submit that the present amendments to the claims, made in accordance with the Examiner’s suggestions from the October 16, 2006, Final Office Action, obviate these rejections.

Claims 1-5 and 9-15 were rejected under 35 U.S.C. § 112, 1<sup>st</sup> Paragraph, because the specification, while being enabling for an isolated *E. coli* host cell transformed with a polynucleotide comprising SEQ ID NO:63 which encodes a mutant oligoribonuclease, where said isolated *E. coli* cell comprises a functional carotenoid enzymatic biosynthetic pathway consisting of proteins of SEQ ID NO:2, 4, 6, 8, 10, 12, 14, 16, and 18; does not reasonably provide enablement for any other

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embodiment as recited in the claims. Applicants respectfully submit that the present amendments to the claims, made in accordance with the Examiner's suggestions from the October 16, 2006, Final Office Action, obviate these rejections.

***Summary***

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. In order to expedite disposition of this case, the Examiner is invited to contact Applicants' representative at the telephone number below to resolve any remaining issues. Should there be a fee due which is not accounted for, please charge such fee to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

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